

# For Avid enthusiasts

*Aimed at the keen audiophile, a new British-made high-end turntable arrives on the scene: the Avid Acutus*

by STEVE HARRIS

Conrad Mas, the man behind the Avid turntable, did much of the development work more than a decade ago, and even brought a prototype unit to a London hi-fi show. The turntable had a strong metal subchassis, from the underside of which grew a closely-spaced forest of metal pins about an inch long, making the turntable look thrusting and purposeful. The pins were not there as macho decoration, however: their purpose was to dissipate unwanted vibration energy in the platter/stylus/arm loop. This scheme was the subject of a patent application. For various reasons, the project was shelved, but now Conrad is back, enthusiasm undimmed.

So although the Acutus turntable (£3995 without arm) is the first Avid product to appear, it's undeniably been developed over a long period, and includes many features claimed to be unique. Pitched as a no-compromise design, it is massively constructed yet has a compact 'footprint' occupying less space than many heavyweight decks. It is a true suspended-subchassis design. The

undergrowth of pins has gone, though — apparently, once a system was actually playing in a room they had a fatal tendency to respond to acoustic input from the speakers.

The foundation for this design is the massive, cast aluminium main chassis, 17mm thick (21mm in places). This carries the three suspension towers, mounted directly above three large, adjustable feet. A rather elegant centre lobe at the front carries a small bubble level, a nice touch. What looks like the fourth foot, at the rear left, is not in fact attached to the main chassis (except by a restraining rubber band) but carries the physically-separate motor housing.

Each suspension tower contains a coil spring in tension, and from these springs is hung the subchassis — another aluminium casting, of complex shape, designed with selected areas of high rigidity and extremely strong. It has to be, to support the 10kg platter. This is carried on a massive inverted main bearing, which has a 16mm diameter hardened stainless steel spindle with a tungsten-carbide tip running on a sapphire thrust plate. The bearing housing alone weighs 800g. The suspension provides free movement in the vertical direction but horizontal movement is inhibited or damped. Each 'corner' of the subchassis is restrained by the

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outward pull of a special rubber band, hooked over two fixed points so as to form a triangle. This eliminates any twisting movement from the subchassis, and indeed, when the platter is disturbed it moves gracefully up and down with absolutely no wobbles or any perceptible lateral motion at all. This makes the turntable very nice to operate.

Avid states that all suspension points have the same frequency independent of load, to prevent erratic subchassis movement; and certainly, the Acutus is unlikely to be disconcerted by the heaviest of arms.

Despite its weight and apparent complexity, the turntable is fairly easy to assemble and set up. Once freed from its rubber bands (bond?) the subchassis can be lifted clear, complete with platter if desired, and placed on a table or bench for arm and cartridge set-up.

Avid's fixed platter mat is of a special composition material to match the characteristic of vinyl, and a massive record clamp secures the record firmly against its surface. The platter has a raised metal centre, about 18mm radius, which lifts the disc centre 1mm or so. Clamping is a two-stage process. The clamp is screwed on to the spindle by turning the upper knob: this brings a flat-faced centre boss, again about 18mm radius, down firmly on to the disc label. Then you screw down an outer ring, which brings a clamping rim into contact with the disc label at a radius of about 40mm. This rim has to be screwed down hard while steadying the platter, so that the label area is dished downwards and the playing area forced against the platter surface.

Some earlier turntables which used this dishing principle pressed the disc down on to a rather small washer around the spindle, with the result that the record could crack around the centre hole. By having a fairly large contact area at the centre and ensuring that this is gripped between platter and boss before the bending (dishing) force is applied, Avid avoids this problem. The clamp is effective but it does have to be screwed down hard, and the two-stage process is an extra complication to the process of putting the record on.

Having adopted a heavy platter, Avid believes that a very high-torque motor is essential to maintain control over the platter. The synchronous motor used here is hand-built into a very chunky housing, and is fed by a purpose-designed quartz-synthesiser AC power supply, which has a split-phase output with the two phases



Left: the Avid Acutus power supply

tuned to the individual motor, reducing noise and vibration to negligible levels. The power supply provides switching for 33.3 and 45rpm. Drive is to a smaller radius formed below the main platter rim, via a round-section belt rather than a flat one, which means that the drive is undisturbed by even quite large vertical movements of the suspension.

## SOUND QUALITY

Avid supplied the review sample with SME V arm and a van den Hul The Frog cartridge. I also tried other moving-coils, but for comparative listening against another turntable, also with SME V, I installed two Reson cartridge bodies, installing the same Reson Recca stylus assembly in each in turn. As the stylus was an extremely tight fit in the bodies, this was a nerve-wracking business, but did give a fair comparison — although in normal use of course, the deck could well be matched with far more exotic cartridges than this.

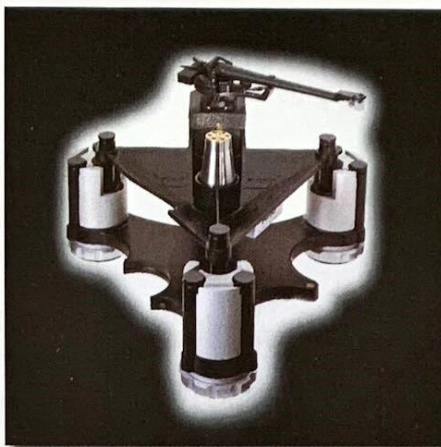
System components used at various times included a Musical Fidelity A1000 integrated amplifier and the Tron pre-/power (review coming soon!), mainly with Avant Garde Uno and Rogers Studio 7 loudspeakers.

Initial listening with The Frog revealed what I would describe as the Avid's main strengths: impressive dynamics and very good detail retrieval, all founded on a strong sense of stability — the only word I can use to sum up what must be a combination of excellent speed stability with a low noise floor. (The absolute speed was correct as far as I could tell by using an SME strobe disc and the usual visual 50Hz reference kindly provided by South Eastern Electricity.)

This deck also largely overturned my last lingering prejudice against heavyweight record decks: the bottom end displayed a clarity and quickness that I hadn't expected: aspects which were refreshingly combined with an apparently well-extended bass frequency response.

After some more comparative listening, and turning to the Reson cartridge, I felt more attuned to the Avid's qualities. On an audiophile jazz example, Dave Brubeck's *Time Out* [the Classic Records re-press of Columbia CS 8912], the Avid demonstrated a string bass sound that was firm and springy, and conveyed the subtleties of Paul Desmond's alto sax tone well, giving it body and attack, but without losing that wispy quality — where too often it just sounds undernourished.

On a fairly natural recording of chamber music, Schubert's 'Death and The Maiden' Quartet, recorded by the Gabrieli Quartet in 1971 [CfP 171], the Avid sound was positively dramatic, immediately loud and impressive, and it seemed to reveal and open up the acoustic space around the instruments, at some points giving that feeling of a particular instrument etched in space: a truly rock-solid image. Yet with this particular example, I was left with a nagging feeling that despite all its obvious merits, I would be happier with a (relatively)



View of the Avid Acutus subchassis, with platter removed

very slightly subdued performance, one that didn't perhaps sound so emphatically dynamic, but where the music was allowed to flow in an effortlessly involving manner.

I think it might be fair to say that the Avid was conceived mainly for those who want to rock out, rather than for those whose idea of heaven is an evening with the Marschallin and *Der Rosenkavalier*.

## CONCLUSION

When Conrad first showed me the turntable, I wound the clamp down far too gently. In fact, after Conrad had screwed it down, I found that considerable effort was needed to release it. There's no doubt that this clamp works, but I have to say that even after acclimatisation I still found it annoying to use. It will also mark the labels of discs, if not nearly so badly as some other clamps do.

Thanks to its well-made suspension and massive build, the Avid has the ability to inspire confidence that everything is working properly, rather than (as some turntables seem to) sending you into nervous fits of tweaking. This confidence extends to the sound quality, with a presentation that proves once again that the subchassis principle really works. I can't say that the Avid actually dethrones the established references in its price class, but it might rattle them a bit.

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